

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. **(Original)** A semiconductor device comprising:  
a logic circuit having a thin film transistor over an insulating surface; and  
a detection means which detects an operating frequency of the logic circuit and outputs a detection result to a threshold value control circuit,  
wherein the thin film transistor comprises a first gate electrode inputted with a logic signal and a second gate electrode inputted with a threshold value control signal from the threshold value control circuit.
2. **(Original)** The semiconductor device according to claim 1,  
wherein a semiconductor thin film is provided over the second gate electrode and the first electrode is provided over the semiconductor thin film.
3. **(Original)** A CPU provided with the semiconductor device set forth in claim 1.
4. **(Original)** An image processing circuit provided with the semiconductor device set forth in claim 1.
5. **(Original)** An electronic device provided with the semiconductor device set forth in claim 1.
6. **(Original)** A semiconductor device comprising:  
a logic circuit having a thin film transistor over an insulating surface; and  
a detection means which detects an operating frequency of the logic circuit and outputs a detection result to a threshold value control circuit,

wherein the thin film transistor comprises a first gate electrode inputted with a logic signal and a second gate electrode inputted with a threshold value control signal from the threshold value control circuit; and

wherein an amount of a current flowing between a source electrode and a drain electrode of the thin film transistor is controlled by the threshold value control signal.

7. **(Original)** The semiconductor device according to claim 6,  
wherein a semiconductor thin film is provided over the second gate electrode and the first gate electrode is provided over the semiconductor thin film.

8. **(Original)** A CPU provided with the semiconductor device set forth in claim 6.

9. **(Original)** An image processing circuit provided with the semiconductor device set forth in claim 6.

10. **(Original)** An electronic device provided with the semiconductor device set forth in claim 6.

11. **(Original)** A semiconductor device comprising:  
a logic circuit having a thin film transistor over an insulating surface; and  
a recording medium which detects an operating frequency of the logic circuit and stores a program for outputting a detection result to a threshold value control circuit,  
wherein the thin film transistor comprises a first gate electrode inputted with a logic signal and a second gate electrode inputted with a threshold value control signal from the threshold value control circuit.

12. **(Original)** The semiconductor device according to claim 11,  
wherein a semiconductor thin film is provided over the second gate electrode and the first gate electrode is provided over the semiconductor thin film.

13. **(Original)** A CPU provided with the semiconductor device set forth in claim 11.

14. **(Original)** A image processing circuit provided with the semiconductor device set forth in claim 11.

15. **(Original)** An electronic device provided with the semiconductor device set forth in claim 11.

16. **(Original)** A semiconductor device comprising:  
a logic circuit having a thin film transistor over an insulating surface; and  
a recording medium which detects an operating frequency of the logic circuit and stores a program for outputting a detection result to a threshold value control circuit,  
wherein the thin film transistor comprises a first gate electrode inputted with a logic signal and a second gate electrode inputted with a threshold control signal from the threshold value control circuit; and  
wherein an amount of a current flowing between a source electrode and a drain electrode of the thin film transistor by the threshold value control signal.

17. **(Original)** The semiconductor device according to claim 16,  
wherein a semiconductor thin film is provided over the second gate electrode and the first gate electrode is provided over the semiconductor thin film.

18. **(Original)** A CPU provided with the semiconductor device set forth in claim 16.

19. **(Original)** An image processing circuit provided with the semiconductor device set forth in claim 16.

20. **(Original)** An electronic device provided with the semiconductor device set forth in claim 16.

21. **(Withdrawn)** A driving method of a semiconductor device comprising:  
a logic circuit having a thin film transistor over an insulating surface; and  
a detection means which detects an operating frequency of the logic circuit and outputs  
a detection result to a threshold value control circuit,  
wherein the detection means discriminates a first mode or a second mode; and  
wherein the threshold value control circuit outputs a threshold value control signal  
according to the first or the second mode to the logic circuit.

22. **(Currently Amended)** A driving method of a semiconductor device comprising:  
a logic circuit having a thin film transistor over an insulating surface; and  
a detection means which detects an operating frequency of the logic circuit and outputs  
a detection result to a threshold value control circuit,  
wherein the detection means discriminates a pending mode or an active mode; and  
wherein the threshold value control ~~circuit~~ ~~outputs~~ outputs a ~~[[the]]~~ threshold value  
control ~~circuit~~ signal which raises a threshold value of the thin film transistor of ~~[[to]]~~ the logic  
circuit when the detection means discriminates the pending mode.

23. **(Original)** A semiconductor device comprising:  
a substrate having an insulating surface;  
a logic circuit having a thin film transistor over the substrate;  
a detection means for detecting an operating frequency of the logic circuit, electrically  
connected to the logic circuit; and  
a threshold value control circuit electrically connected to the detection means.

24. **(Withdrawn)** A semiconductor device comprising:  
a substrate having an insulating surface;  
a logic circuit having a thin film transistor over the substrate;  
an address comparator electrically connected to the logic circuit;  
a counter electrically connected to the address comparator;  
a discrimination circuit electrically connected to the counter; and

a threshold value control circuit electrically connected to the discrimination circuit.

25. **(Original)** A semiconductor device comprising:

a substrate having an insulating surface;

a logic circuit having a thin film transistor over the substrate;

a detection means for detecting an operating frequency of the logic circuit, electrically connected to the logic circuit; and

a threshold value control circuit which is electrically connected to the detection means, wherein the thin film transistor comprises a plurality of gate electrodes; and

wherein the threshold value control circuit is connected to at least one of the plurality of gate electrodes.

26. **(Withdrawn)** A semiconductor device comprising:

a substrate having an insulating surface;

a logic circuit having a thin film transistor over the substrate;

an address comparator electrically connected to the logic circuit;

a counter electrically connected to the address comparator;

a discrimination circuit electrically connected to the counter; and

a threshold value control circuit electrically connected to the discrimination circuit,

wherein the thin film transistor comprises a plurality of gate electrodes; and

wherein the threshold value control circuit is electrically connected to at least one of the plurality of gate electrodes.

27. **(Previously Presented)** The semiconductor device according to claim 1, wherein the detection means comprises:

an address comparator electrically connected to the logic circuit;

a counter electrically connected to the address comparator; and

a discrimination circuit electrically connected to the counter.

28. **(Previously Presented)** The semiconductor device according to claim 6, wherein the detection means comprises:

- an address comparator electrically connected to the logic circuit;
- a counter electrically connected to the address comparator; and
- a discrimination circuit electrically connected to the counter.

29. **(Withdrawn)** The semiconductor device according to claim 22, wherein the detection means comprises:

- an address comparator electrically connected to the logic circuit;
- a counter electrically connected to the address comparator; and
- a discrimination circuit electrically connected to the counter.

30. **(Previously Presented)** The semiconductor device according to claim 23, wherein the detection means comprises:

- an address comparator electrically connected to the logic circuit;
- a counter electrically connected to the address comparator; and
- a discrimination circuit electrically connected to the counter.